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Attorney Docket No.: 5649-805DV

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Kang-Wook Park
Serial No.: 09/911,098
Filed: July 23, 2001

Group Art Unit: 2814
Examiner: Dana Farahani

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For: **BIPOLAR JUNCTION TRANSISTORS HAVING TRENCH-BASED
BASE ELECTRODES**

November 11, 2002

Box Non-Fee Amendment
Commissioner for Patents
Washington, DC 20231

AMENDMENT AND REQUEST FOR RECONSIDERATION

Sir:

This Amendment and Request for Reconsideration is responsive to the
Official Action of August 14, 2002 (Paper No. 4).

In the Claims:

Please amend the claims as follows:

28. (Amended) A bipolar junction transistor, comprising:

a semiconductor substrate having an intrinsic collector region of first
conductivity type therein that extends to a surface thereof;

an electrically insulating layer on the surface of a semiconductor
substrate, said electrically insulating layer having an opening therein and a
lateral recess extending from the opening;

a trench that extends into the surface semiconductor substrate and the
intrinsic collector region and is self-aligned to the opening in said electrically
insulating layer;

a polysilicon base electrode of second conductivity type in the lateral
recess and in the trench;

an extrinsic base region of second conductivity type that extends into the
intrinsic collector and is self-aligned to a portion of the polysilicon base electrode
that extends into the lateral recess; and

an emitter region of first conductivity type that extends in the intrinsic
collector region.

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